



US008349581B2

(12) **United States Patent**  
**Hazen et al.**

(10) **Patent No.:** **US 8,349,581 B2**  
(45) **Date of Patent:** **\*Jan. 8, 2013**

(54) **ASSESSING THE RISK OF A MAJOR  
ADVERSE CARDIAC EVENT IN PATIENTS  
WITH CHEST PAIN**

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(75) Inventors: **Stanley L. Hazen**, Pepper Pike, OH  
(US); **Marc S. Penn**, Beachwood, OH  
(US); **Renliang Zhang**, Beachwood, OH  
(US)

(73) Assignee: **The Cleveland Clinic Foundation**,  
Cleveland, OH (US)

(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 552 days.

This patent is subject to a terminal dis-  
claimer.

(21) Appl. No.: **12/265,081**

(22) Filed: **Nov. 5, 2008**

(65) **Prior Publication Data**

US 2009/0061472 A1 Mar. 5, 2009

**Related U.S. Application Data**

(63) Continuation of application No. 10/972,058, filed on  
Oct. 22, 2004, now Pat. No. 7,459,286.

(60) Provisional application No. 60/513,490, filed on Oct.  
22, 2003.

(51) **Int. Cl.**  
**C12Q 1/28** (2006.01)  
**G01N 33/48** (2006.01)

(52) **U.S. Cl.** ..... **435/28; 436/63**

(58) **Field of Classification Search** ..... None  
See application file for complete search history.

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*Primary Examiner* — Rebecca Prouty

*Assistant Examiner* — Paul Martin

(74) *Attorney, Agent, or Firm* — Tarolli, Sundheim, Covell  
& Tummino LLP

(57) **ABSTRACT**

Methods for characterizing the near term risk of experiencing  
a major adverse cardiac event in a patient presenting with  
chest pain are provided. In one embodiment the method com-  
prises determining the level of myeloperoxidase (MPO)  
activity in a bodily sample obtained from the patient. In  
another embodiment, the method comprises determining the  
level of MPO mass in a bodily sample obtained from the  
patient. In another embodiment, the method comprises deter-  
mining the level of one or more select MPO-generated oxi-  
dation products in a bodily sample obtained from the patient.  
The select MPO-generated oxidation products are dityrosine,  
nitrotyrosine, chlorotyrosine, methionine sulfoxide or an  
MPO-generated lipid peroxidation product.

**8 Claims, 2 Drawing Sheets**